National Institute of Environmental Health Sciences

Potential effects of global environmental changes on cryptosporidiosis and giardiasis transmission

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Abstract:

Global climate change will affect the viability and spread of zoonotic parasites, while agricultural land use changes will influence infection sources and reservoirs. The health impact of these environmental changes will depend on the social, economic and physical resilience of the population. This review describes the influence of climatic variability, land-use changes, and social factors on cryptosporidiosis and giardiasis in humans. Global to public health to individual-level interventions to reduce future disease burden are highlighted. Because future environmental change is expected to have the greatest health impacts in countries with limited resources, increasing research and adaptation capabilities in these regions is emphasized. Understanding how environmental and social processes interact to influence disease transmission is essential for the development of effective strategies for disease prevention.

Source: http://dx.doi.org/10.1016/j.pt.2012.10.005

Resource Description

Communication:

resource focus on research or methods on how to communicate or frame issues on climate change; surveys of attitudes, knowledge, beliefs about climate change

A focus of content

Communication Audience:

audience to whom the resource is directed

Researcher

Exposure :

weather or climate related pathway by which climate change affects health

Ecosystem Changes, Food/Water Security, Precipitation, Temperature

Food/Water Security: Livestock Productivity

Temperature: Fluctuations

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Foodborne/Waterborne Disease

Foodborne/Waterborne Disease: Cryptosporidiosis, Giardiasis

Intervention:

strategy to prepare for or reduce the impact of climate change on health

A focus of content

Mitigation/Adaptation:

mitigation or adaptation strategy is a focus of resource

Adaptation

Population of Concern: A focus of content

Other Vulnerable Population: Rural populations

Resource Type:

format or standard characteristic of resource

Review

Resilience:

capacity of an individual, community, or institution to dynamically and effectively respond or adapt to shifting climate impact circumstances while continuing to function

A focus of content

Timescale:

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment:

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content